

## CLAIMS

What is claimed is:

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- 1 1. A method for aliasing vertex attributes during vertex processing, comprising:  
2 (a) mapping each of a plurality of identifiers to one of a plurality of parameters  
3 associated with vertex data; and  
4 (b) processing the vertex data by calling the parameters utilizing a vertex  
5 program capable of referencing the parameters using the identifiers.

- 1 2. The method as recited in claim 1, wherein the parameters are selected from  
2 the group consisting of vertices, normals, colors, fog coordinates, vertex  
3 weights, and texture coordinates.

- 1 3. The method as recited in claim 1, wherein the parameters include per-vertex  
2 parameters.

- 1 4. The method as recited in claim 1, wherein the parameters are also capable of  
2 being called by a conventional semantic name associated with the  
3 parameters.

- 1 5. The method as recited in claim 1, wherein a need for defining additional  
2 semantic names for the parameters is avoided as a result of the aliasing.

- 1 6. The method as recited in claim 1, wherein the mapping is carried out by an  
2 application program interface.

- 1 7. A computer program product for aliasing vertex attributes during vertex  
2 processing, comprising:

- 3 (a) computer code for mapping each of a plurality of identifiers to one of a  
4 plurality of parameters associated with vertex data; and  
5 (b) computer code for processing the vertex data by calling the parameters  
6 utilizing a vertex program capable of referencing the parameters using the  
7 identifiers.
- 1 8. The computer program product as recited in claim 7, wherein the parameters  
2 are selected from the group consisting of vertices, normals, colors, fog  
3 coordinates, vertex weights, and texture coordinates.
- 1 9. The computer program product as recited in claim 7, wherein the parameters  
2 include per-vertex parameters.
- 1 10. The computer program product as recited in claim 7, wherein the parameters  
2 are also capable of being called by a conventional semantic name associated  
3 with the parameters.
- 1 11. The computer program product as recited in claim 7, wherein a need for  
2 defining additional semantic names for the parameters is avoided as a result  
3 of the aliasing.
- 1 12. The computer program product as recited in claim 7, wherein the mapping is  
2 carried out by an application program interface.
- 1 13. A system for aliasing vertex attributes during vertex processing, comprising:  
2 (a) logic for mapping each of a plurality of identifiers to one of a plurality of  
3 parameters associated with vertex data; and  
4 (b) logic for processing the vertex data by calling the parameters utilizing a  
5 vertex program capable of referencing the parameters using the identifiers.

- 1 14. The system as recited in claim 13, wherein the parameters are selected from  
2 the group consisting of vertices, normals, colors, fog coordinates, vertex  
3 weights, and texture coordinates.
- 1 15. The system as recited in claim 13, wherein the parameters include per-vertex  
2 parameters.
- 1 16. The system as recited in claim 13, wherein the parameters are also capable of  
2 being called by a conventional semantic name associated with the  
3 parameters.
- 1 17. The system as recited in claim 13, wherein a need for defining additional  
2 semantic names for the parameters is avoided as a result of the aliasing.
- 1 18. The system as recited in claim 13, wherein the mapping is carried out by an  
2 application program interface.
- 1 19. A method for aliasing vertex attributes during vertex processing, comprising:  
2 (a) mapping each of a plurality of identifiers to one of a plurality of parameters  
3 associated with vertex data; and  
4 (b) processing the vertex data by referencing the parameters using the identifiers;  
5 (c) wherein the parameters are selected from the group consisting of vertices,  
6 normals, colors, fog coordinates, vertex weights, and texture coordinates.
- 1 20. A method for aliasing vertex attributes during vertex processing, comprising:  
2 (a) mapping each of a plurality of identifiers to one of a plurality of parameters  
3 associated with vertex data; and  
4 (b) processing the vertex data by referencing the parameters using the identifiers;  
5 (c) wherein a need for defining additional semantic names for the parameters is  
6 avoided as a result of the aliasing.

- 1 21. A data structure stored in memory for aliasing vertex attributes during vertex
- 2 processing, comprising:
- 3 (a) a table that maps each of a plurality of identifiers to one of a plurality of
- 4 parameters associated with vertex data;
- 5 (b) wherein the vertex data is processed by calling the parameters utilizing a
- 6 vertex program capable of referencing the parameters using the table.

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